

AMENDMENTS

In the Claims:

This listing of claims replaces all prior versions, and listings, of claims in the application.

1. (Currently Amended) A polyimide film ~~obtainable~~ obtained by reacting an aromatic diamine having a benzoxazole structure with an aromatic tetracarboxylic acid anhydride, which film has a planar orientation coefficient of 0.79-0.89 as measured by an X-ray diffraction method and a dielectric constant of 2.7-3.1 at 100 GHz as measured by a cavity resonance perturbation method.

2. (Original) The polyimide film of claim 1, having a dielectric loss tangent at 100 GHz of 0.0001-0.03 as measured by the cavity resonance perturbation method.

3. (Previously Presented) The polyimide film of claim 1, having dielectric constants of 2.7-3.1 at 1 GHz and 2.6-3.0 at 100 GHz, as measured by the cavity resonance perturbation method.

4. (Previously Presented) The polyimide film of claim 1, which has a density of 1.47 g/cm³ - 1.55 g/cm³.

5. (Currently Amended) A polyimide film ~~obtainable~~ obtained by reacting an aromatic diamine having a benzoxazole structure with an aromatic tetracarboxylic acid anhydride to produce a polyamide acid solution, drying the polyamic acid solution to produce a self-supporting green polyamide acid film, passing the green film through a nitrogen purged continuous type heat treatment furnace to heat the green film to carry out an imidation reaction and cooling the produced film to room temperature to give the polyimide film,

wherein the amount of water vaporized at a high temperature during heating at 500°C for 10 sec of the film immediately after helium purge at 170°C for 7 min and preliminary drying is not more than 5000 ppm.

6. (Previously Presented) The polyimide film of claim 1, wherein the ratio (ϵ_{65}/ϵ_D) of the dielectric constant ϵ_{65} at 100 GHz of the film humidity-conditioned under a constant

temperature and humidity conditions of 20°C, 65% RH for 94 hr, as measured by the cavity resonance perturbation method, to the dielectric constant ϵ_D at 100 GHz of the film vacuum dried under the conditions of 120°C, for 24 hr, as measured by the cavity resonance perturbation method, is within the range of 1.00-1.10.

7. (Currently Amended) A polyimide film ~~obtainable~~ obtained by reacting an aromatic diamine having a benzoxazole structure with an aromatic tetracarboxylic acid anhydride, wherein the absolute value of the difference between a surface planar orientation degree of one surface (surface A) and a surface planar orientation degree of the other surface (surface B) of the film is 0-2.

8. (Previously Presented) The polyimide film of claim 7, wherein the surface planar orientation degree of the film surface having a higher surface planar orientation degree is not more than 15.

9. (Previously Presented) The polyimide film of claim 7, which has a curling degree of 0%-5%.

10. (Canceled)

11. (Previously Presented) A base substrate for printed wiring assemblies, which comprises the polyimide film of claim 1.

12. (Withdrawn) A method of producing a polyimide film, which comprises reacting an aromatic diamine with an aromatic tetracarboxylic acid anhydride to give a polyamide acid, casting a solution thereof on a support and drying the solution to give a self-supporting polyimide precursor film and polyimidating said precursor film, wherein the polyimide precursor film satisfies the relationships shown by the following formulas between an imidation rate A_{im} of one surface side (surface A side) and an imidation rate B_{im} of the other surface side (surface B side) of the polyimide precursor film and said polyimide precursor film is subjected to imidation:

$$\text{formula 1: } |A_{im} - B_{im}| \leq 5$$

formula 2: $0 \leq A_{im} \leq 15$

formula 3: $0 \leq B_{im} \leq 15$.

13. (Previously Presented) The polyimide film of claim 2, having dielectric constants of 2.7-3.1 at 1 GHz and 2.6-3.0 at 100 GHz, as measured by the cavity resonance perturbation method.

14. (Previously Presented) The polyimide film of claim 2, which has a density of 1.47 g/cm^3 - 1.55 g/cm^3 .

15. (Previously Presented) The polyimide film of claim 7, wherein the ratio (ϵ_{65}/ϵ_D) of the dielectric constant ϵ_{65} at 100 GHz of the film humidity-conditioned under a constant temperature and humidity conditions of 20°C, 65% RH for 94 hr, as measured by the cavity resonance perturbation method, to the dielectric constant ϵ_D at 100 GHz of the film vacuum dried under the conditions of 120°C, for 24 hr, as measured by the cavity resonance perturbation method, is within the range of 1.00-1.10.

16. (Previously Presented) The polyimide film of claim 8, which has a curling degree of 0%-5%.

17. (Previously Presented) A base substrate for printed wiring assemblies, which comprises the polyimide film of claim 4.

18. (Previously Presented) A base substrate for printed wiring assemblies, which comprises the polyimide film of claim 5.

19. (Previously Presented) A base substrate for printed wiring assemblies, which comprises the polyimide film of claim 7.